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REMARKS

Applicants enclose a Sequence Listing for the above-captioned application. The computer-readable form in this application is identical with that filed in application no. **08/600,656**, filed February 13, 1996. In accordance with 37 CFR 1.821(e), please use the **last filed** computer readable form filed in that application as the computer readable form for the instant application. It is understood that the Patent and Trademark Office will make the necessary change in application number and filing date for the computer readable form that will be used for the instant application. The content of the attached Sequence Listing, and of the computer readable form filed in the parent application is the same.

The specification has been amended to provide SEQ ID NOS for the sequences disclosed therein. This submission contains no new matter.

The Examiner is hereby invited to contact the undersigned by telephone if there are any questions concerning this amendment or application.

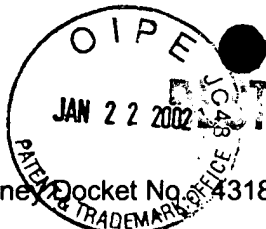
Respectfully submitted,

Date: December 21, 2001



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PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: Bisgaard-Frantzen et al.

Confirmation No: 7527

Serial No.: 09/902,188

Group Art Unit: 1751

Filed: July 10, 2001

Examiner: To be assigned

For: Amylase Variants

**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

Commissioner for Patents  
Washington, DC 20231

Sir:

Below is a marked-up version of the amendments made in the accompanying amendment.

**IN THE SPECIFICATION:**

The paragraph traversing page 56, line 21 to page 57, line 17, has been amended as follows:

#7113:

GCT GCG GTG ACC TCT TTA AAA AAT AAC GGC (SEQ ID NO:8)

Y296:

CC ACC GCT ATT AGA TGC ATT GTA C (SEQ ID NO:9)

#6779:

CTT ACG TAT GCA GAC GTC GAT ATG GAT CAC CC (SEQ ID NO:10)

#6778:

G ATC CAT ATC GAC GTC TGC ATA CGT AAG ATA GTC (SEQ ID NO:11)

#3811:

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TT A(C/G)G GGC AAG GCC TGG GAC TGG (SEQ ID NO:12)

#7449:

C CCA GGC CTT GCC C(C/G)T AAA TTT ATA TAT TTT GTT TTG (SEQ ID NO:13)

#3810:

G GTT TCG GTT CGA AGG ATT CAC TTC TAC CGC (SEQ ID NO:14)

#7450:

GCG GTA GAA GTG AAT CCT TCG AAC CGA AAC CAG (SEQ ID NO:15)

B1:

GGT ACT ATC GTA ACA ATG GCC GAT TGC TGA CGC TGT TAT TTG C (SEQ ID NO:16)

#6616:

P CTG TGA CTG GTG AGT ACT CAA CCA AGT C (SEQ ID NO:17)

#8573:

CTA CTT CCC AAT CCC AAG CTT TAC CTC GGA ATT TG (SEQ ID NO:18)

#8569:

CAA ATT CCG AGG TAA AGC TTG GGA TTG GGA AGT AG (SEQ ID NO:19)

#8570:

TTG AAC AAC CGT TCC ATT AAG AAG (SEQ ID NO:20)

**The paragraph on page 60, lines 5-23, as been amended as follows:**

For the construction of the pairwise deletion variant G182\* + G184\*, the following mutagenesis primer was used:

P CTC TGT ATC GAC TTC CCA GTC CCA AGC TTT TGT CCT GAA TTT ATA TAT TTT GTT TTG AAG (SEQ ID NO:21)

For the construction of the pairwise deletion variant R181\* + T183\*, the following mutagenesis primer was used:

P CTC TGT ATC GAC TTC CCA GTC CCA AGC TTT GCC TCC GAA TTT ATA TAT TTT GTT TTG AAG (SEQ ID NO:22)

For the construction of the substitution variant Y243F, the following mutagenesis primer was used:

P ATG TGT AAG CCA ATC GCG AGT AAA GCT AAA TTT TAT ATG TTT CAC TGC ATC (SEQ ID NO:23)

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For the construction of the substitution variant K269R, the following mutagenesis primer was used:

P GC ACC AAG GTC ATT TCG CCA GAA TTC AGC CAC TG (SEQ ID NO:24)

For the construction of the pairwise substitution variant L351C + M430C, the following mutagenesis primers were used simultaneously:

1) P TGT CAG AAC CAA CGC GTA TGC ACA TGG TTT AAA CCA TTG (SEQ ID NO:25)

2) P ACC ACC TGG ACC ATC GCT GCA GAT GGT GGC AAG GCC TGA ATT (SEQ ID NO:26)

**The paragraph on page 61, lines 16-17, has been amended as follows:**

P GGC AAA AGT TTG ACG TGC CTC GAG AAG AGG GTC TAT (SEQ ID NO:27)

P TTG TCC CGC TTT ATT CTG GCC AAC ATA CAT CCA TTT (SEQ ID NO:28)

**The paragraph on page 62, lines 9-14, has been amended as follows**

For the construction of the pairwise deletion variants R181\* + D183\* and R181\* + G182\*, it was chosen to alter the flanking amino acids in the variant D183\* + G184\* instead of deleting the specified amino acids in the wild type gene for SEQ ID No. 2. The following mutagenesis primer was used for the mutagenesis with pTVB114 as template:

PCC CAA TCC CAA GCT TTA CCA (T/C)CG AAC TTG TAG ATA CG (SEQ ID NO:29)

**The paragraph on page 62, lines 20-23, has been amended as follows:**

For the construction of G182\* + G184\* and R181\* + G184\*, the following mutagenesis primer was used with pTVB114 as template:

PCC CAA TCC CAA GCT TTA TCT C(C/G)G AAC TTG TAG ATA CG (SEQ ID NO:30)

**The paragraph on page 62, lines 29-31, has been amended as follows:**

For the construction of D183\* + G184\* + M202L the following mutagenesis primer was used:

PGA TCC ATA TCG ACG TCT GCA TAC AGT AAA TAA TC (SEQ ID NO:31)

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The paragraph on page 63, lines 29-31, has been amended as follows:

For the construction of D183\* + G184\* + M202I the following mutagenesis primer was used:

PGA TCC ATA TCG ACG TCT GCA TAA ATT AAA TAA TC (SEQ ID NO:32)